

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A waveguide unit comprising:  
a vertically polarized waveguide;  
a horizontally polarized waveguide; and  
a waveguide type-polarized wave converter interposed between said vertically polarized waveguide and [[the]] said horizontally polarized waveguide[[;]],  
said waveguide type-polarized wave converter having a slit on a face vertical to [[its]]  
a guiding direction, the shape of said slit being constituted by a combination of two quadrate parts and a connecting part for connecting the two quadrate parts, each of said quadrate parts being on a plane which contains orthogonal coordinate axes X and Y, and symmetrically located about the Y axis, each center point of the quadrate parts being located on the X axis,and  
at least a side of one of the quadrate parts makes an angle of 45 degrees with the X axis.

Claim 2 (Currently Amended): The waveguide unit according to claim 1, wherein  
[[the]] a dimension of said slit in [[the]] a direction to which the microwave travels is substantially set to 1/4 of [[the]] a group wavelength.

Claim 3 (Currently Amended): The waveguide unit according to claim 1 [[or 2]], wherein each side of said quadrate parts is at an angle of 45 degrees with the X axis.

Claim 4 (Currently Amended): The waveguide unit according to either one of claim claims 1 to 3, wherein these said vertically and horizontally polarized waveguides and said

polarized wave converter are integrally manufactured ~~but can be divided into~~ and the waveguide unit has two parts.

Claim 5 (Currently Amended): The waveguide unit according to claim 4, wherein [[said]] a divided face of said waveguide unit is at an angle of 45 degrees with the X axis or Y axis.

Claim 6 (Original): The waveguide unit according to claim 4, wherein at least one wall angle of the waveguide unit differs slightly from 0, 45, or 90 degrees.

Claim 7 (Original): The waveguide unit according to claim 4, wherein said quadrat parts of the slit are rounded or tapered at the end corners.

Claim 8 (Currently Amended): The waveguide unit according to claim 1, wherein said connecting part forms provides a ridge structure having a narrow and straight shape.